

PATENT SPECIFICATION

749,570



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COMPLETE SPECIFICATION

Improvements in or relating to Packings for Transporting Cinematograph Film and the like.

We, **GIORGIO DE ROBERTO** and **ATTILIO QUATTRINO**, both of 29 XX Settembre Street, Genoa, Italy, both of Italian nationality, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The present invention relates to packing arrangements for transporting cinematograph films and the like.

The packing systems used up till now for this purpose frequently consists of panels mounted in frames and stuck together. As a result of the shocks which such a packing sustains during loading and unloading, the individual parts easily become detached, so that large openings are made which create contact with the atmosphere, with the well known dangerous consequences to the cinematograph film in the packing. If the parts of the packing are joined together by means of screws, these easily work out of their holes and are frequently replaced by nails, which offer even less security. In addition, the nails present a constant danger in the interior because they may cause sparks through contact with iron parts and also cause inconvenience in handling and in carrying the package by hand.

As regards the arrangement of the boxes containing the films in the packing mentioned above, since they are not secured against movement, there is a danger that they will open, so that friction will arise which can cause considerable damage.

Frequently, in order to fill up the empty spaces, cardboard and waste paper are used, which are inflammable materials and their use, moreover, represents an infringement of the clear and express rules governing transport of such materials. The difficulty of the detachment of the packing panels and the possibility of the inflammable material getting out constitute a very grave position as regards

contact of the films with the atmosphere. With regard to the handling of the packing, it should be noted that in view of its angular shape, the possibility of working out of the nails and screws, the loosening of hoop-irons and angle irons and protections and the weight of the package (20-30 kg.), the usually female staff working with the films find the handling of such packings inconvenient.

Owing to the above-mentioned difficulties, when the packages cannot readily be moved by hand, and are therefore transported by trolleys or the like they are exposed to the risk of falling from the top of the trolley or the like, with consequent further possibilities of damage.

The present invention has the object of providing a packing for use in transporting cinematograph film and the like which is at least substantially free of the above-mentioned drawbacks.

According to the present invention, a packing arrangement is provided for use in transporting cinematograph film and the like, comprising a cylindrical or convex barrel which comprises a plurality of barrel staves and exterior hoops of iron or other material, a fixed base and a cover having a fixed portion secured to the barrel by dovetailing or by means of wooden screws and a movable portion hingedly connected to the fixed portion.

A packing arrangement embodying the invention provides the following advantages:

1. The packing arrangement is constructed of ordinary barrel staves and employs metal and plastics;

2. The contents are packed and immobilized with a system of belts, so that the above-mentioned difficulties cannot possibly arise;

3. In view of the shape of the packing according to the invention and the absence of corners and handles, the packing is convenient to handle for the operations of loading and

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unloading and for moving, for which the package itself need not be lifted, but only need be pushed with the hands or feet, in order to be conveyed to its destination, without any danger that the boxes contained therein will be displaced. In addition, a stick or the like with a forked end may conveniently be used for guiding the barrel;

4. On the outside of the packing arrangement, there are conveniently provided two additional rubber rings for absorbing the inevitable shocks the packing receives in the course of its use;

5. The invention presents a considerable saving in materials as compared with packings used heretofore.

In order that the invention may be readily understood, one preferred embodiment is described below in conjunction with the accompanying drawings, in which:

Fig. 1 shows a packing according to the invention in vertical section, without any load therein;

Fig. 2 shows a vertical section similar to Fig. 1 of the loaded packing;

Fig. 3 shows in sectional plan view the disposition of mounting for belts for securing the load;

Fig. 4 shows a perspective view on an enlarged scale of the buckle associated with the belts;

Fig. 5 shows the packing in side elevation; Fig. 6 shows a fragmentary view of the wall of the packing in radial section.

Referring to Figs. 1 and 2, the packing arrangement consists of a convex barrel *A*, such as of wood, metal or plastics, with a fixed base *P* at the lower end and a partly removable cover *B* at the other end. The barrel *A* is provided on the outside with hoops of iron or other material, serving to keep the staves together and provide a rigid structure capable of withstanding the shocks and friction caused during handling.

The cover *B* includes a movable portion *C* which covers approximately two thirds of the area of the end of the barrel *A* and is hingedly secured to the fixed portion, which is secured in the end of the barrel *A* by dovetailing or by means of wooden screws.

The end of the barrel *A* having the partly removable cover *B* is provided with a hinged strap *D* co-operating with the usual hasp and arranged to receive a padlock or a lead seal (not shown) when the portion *C* is closed. In this position, the portion *C* rests upon a seating formed inside the barrel *A*, and this seating is reinforced by one of the hoops *R* fixed to the outside with rivets.

To facilitate the handling of the barrel *A*, the base *P* and the cover *B* are fitted at some distance in from the extreme edges of the barrel *A*, so that the edges can be taken hold of and the loading and unloading effected more easily.

As seen best in Fig. 5, the barrel *A* is also provided on the outside with two rings *O* of rubber or other resilient material which are secured by screws *Q* and which serve to deaden any impact received by the packing in use. The rings *O* are formed with a dovetail section foot, as seen in Fig. 6, which engages in a corresponding groove provided around the barrel *A*.

Inside the barrel *A*, as shown in Figs. 1 to 4, means are provided for arranging and immobilizing the boxes containing the films which are to be packed in the barrel *A* for transportation. These means include two belts *E* and *F*, the belt *E* passing through a jointed loop *G* fitted to the fixed portion of the cover *B*, and its two ends being fixed to jointed loops *H* on the fixed base *P* of the barrel *A*, at points defined by two vertices of an imaginary equilateral triangle, as seen in Fig. 3. The second belt *F* has one end free and the other end secured to a jointed loop *H* arranged at the third vertex of the triangle. A metal strip *S* provided with eyelet holes is disposed on the end of the belt *F* and is arranged to co-operate with a buckle handle *I* carried on a triangular metal loop *L*, through which the belt *E* is passed. The buckle handle *I* is extended to form a lever *M* which carries a hook *N* arranged to lodge in one of the eyelet holes in the strip *S*.

The barrel *A* is packed with boxes of cinematograph film and the belts *E* and *F* are brought up the sides of the boxes at three spaced points and converge at the top. The buckle handle *I* is inserted into a suitable eyelet hole and the lever *M* is depressed to tighten the belts *E* and *F* so as to hold the boxes firmly, the hook *N* being spaced along the lever *M* so as to engage a further eyelet hole and maintain the belts *E* and *F* in their tightened positions about the boxes, as illustrated in Fig. 2.

What we claim is:

1. A packing arrangement for use in transporting cinematograph film and the like, comprising a cylindrical or convex barrel which comprises a plurality of barrel staves and exterior hoops of iron or other material, a fixed base and a cover having a fixed portion secured to the barrel by dovetailing or by means of wooden screws and a movable portion hingedly connected to the fixed portion.

2. A packing arrangement according to claim 1, in which the movable portion of the cover is arranged to be secured in its closed position by means of a strap and hasp serving to receive a padlock or a lead seal.

3. A packing arrangement according to claim 1 or 2, in which the barrel is provided with two rings of rubber or other resilient material, which serve to absorb impacts received by the packing arrangement in use.

4. A packing arrangement according to

- claim 1, 2 or 3, in which a belt system is provided inside the barrel for securing the boxes of cinematograph film or the like to be transported therein.
- 5 5. A packing arrangement according to claim 4, in which two bolts are provided, one passing through a loop mounted on the fixed portion of the cover and having its two ends fixed to the base of the barrel at two vertices of an imaginary equilateral triangle drawn on the base and the other belt being secured to the base of the barrel at the third vertex of the triangle, the free end of the last-mentioned belt being provided with eyelet 10 holes serving to co-operate with a buckle carried on the first-mentioned belt.
- 15 6. A packing arrangement according to claim 5, in which the buckle includes a lever which is provided with a hook arranged to engage with one of the eyelet holes, the buckle 20 being carried on a metal loop through which the first-mentioned belt passes, whereby the belts are disposed so as to pass up the boxes contained in the barrel and converge at the top, the buckle being engaged with an eyelet 25 hole so as to tighten the belts on depression of the lever until the hook engages with a further eyelet hole so as to maintain the belts in their tightened relation.
- 30 7. A packing arrangement for use in transporting cinematograph film or the like substantially as hereinbefore described and as shown in the accompanying drawings.
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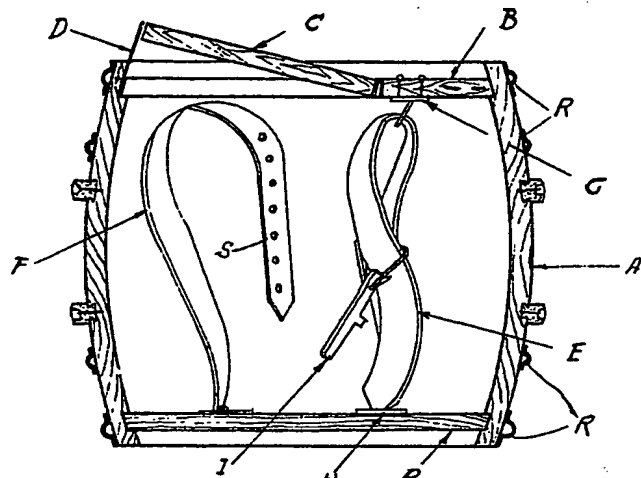


Fig. 1

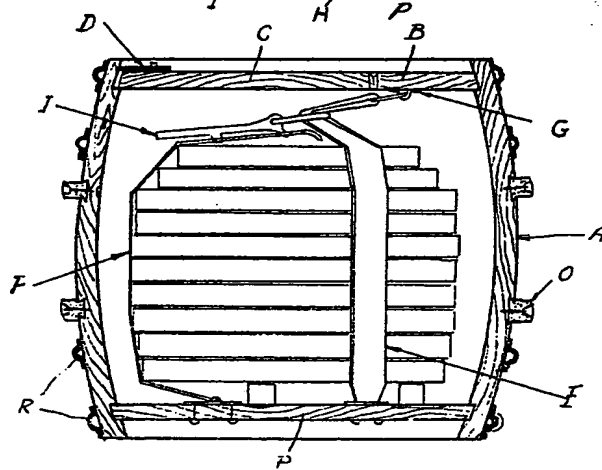


Fig. 2

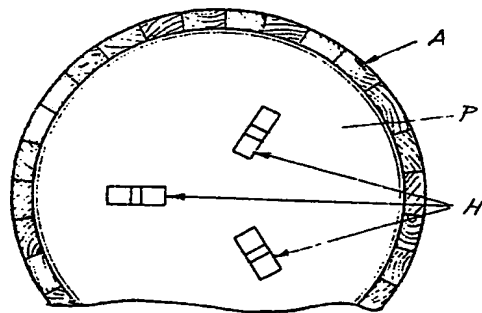


Fig. 3

749,570 COMPLETE SPECIFICATION

2 SHEETS

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the Original on a reduced scale.

SHEETS 1 & 2

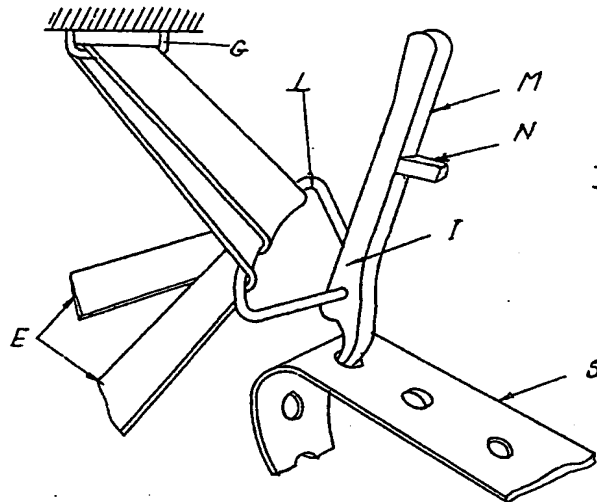


Fig. 4

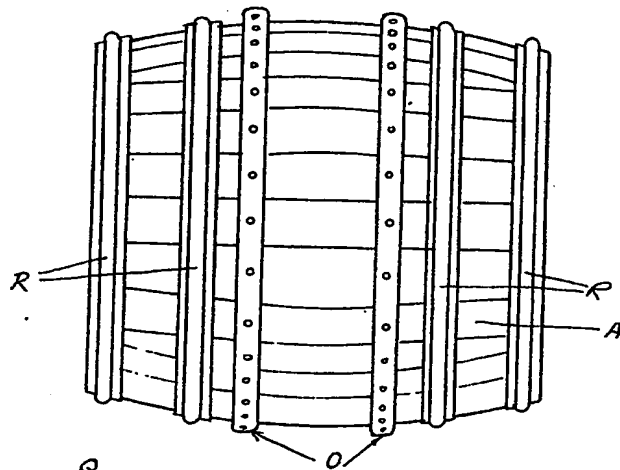


Fig. 5

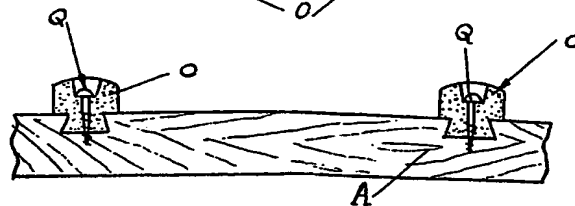


Fig. 6

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 2 SHEETS
 This drawing is a reproduction of
 the Original on a reduced scale.
 SHEETS 1 & 2

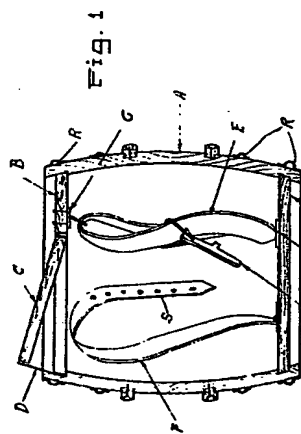


Fig. 1

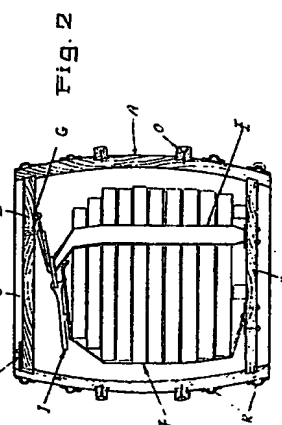


Fig. 2

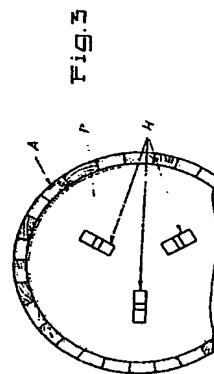


Fig. 3

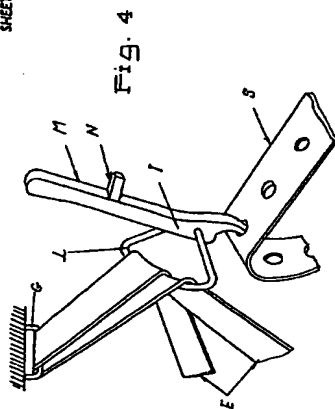


Fig. 4

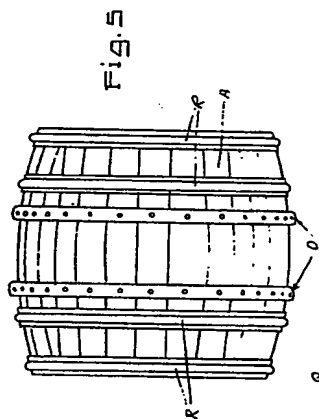


Fig. 5

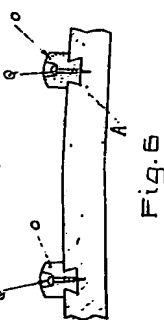


Fig. 6